

CLAIMS

1. A method of fabricating an oxide-nitride-oxide (ONO) layer in a memory cell, the method comprising the steps of:

forming a bottom oxide layer on a substrate;

depositing a nitride layer, and

oxidizing a top oxide layer, thereby causing oxygen to be introduced into said nitride layer.

5 2. A method of fabricating an oxide-nitride-oxide (ONO) layer in a memory cell, the method comprising the steps of:

10 forming a bottom oxide layer on a substrate;

depositing a nitride layer, and

oxidizing a portion of a top oxide layer, thereby causing oxygen to be introduced into said nitride layer;

depositing a remaining portion of said top oxide layer, thereby assisting in controlling the amount of oxygen introduced into said nitride layer.

15 3. A method of fabricating an oxide-nitride-oxide (ONO) layer in a memory cell, the method comprising the steps of:

20 forming a bottom oxide layer on a substrate;

depositing a nitride layer;

depositing a portion of a top oxide layer; and

oxidizing a remaining portion of said top oxide layer, thereby causing oxygen to be introduced into said nitride layer.

4. A method for improving the charge retention in a nitride layer of a memory chip, said method comprising the steps of:

depositing a nitride layer; and
introducing oxygen into said nitride layer.

5. A method for improving the charge retention in a nitride layer of a memory chip, said method comprising the steps of:

5 depositing a nitride layer,
controlling the thickness of said deposited nitride layer; and
introducing oxygen into said nitride layer.

6. A method for fabricating an oxygen-nitride-oxygen (ONO) layer in a memory cell, and for controlling the thickness of a nitride layer and introducing oxygen thereto, the method comprising the steps of:

0 forming a bottom oxide layer on a substrate;
10 depositing a nitride layer at a thickness approximate to the final thickness after fabrication;
15 depositing a portion of a top oxide layer; and
controlling the introduction of oxygen into said nitride layer.